

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
2 June 2005 (02.06.2005)

PCT

(10) International Publication Number
WO 2005/049631 A1

(51) International Patent Classification⁷: **C07H 15/04**,
15/207, A61K 31/7004, 31/7016, A61P 29/00, 17/00,
11/06

(21) International Application Number:
PCT/NZ2004/000293

(22) International Filing Date:
18 November 2004 (18.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
529603 18 November 2003 (18.11.2003) NZ
533245 31 May 2004 (31.05.2004) NZ

(71) Applicants (*for all designated States except US*):
THE MALAGHAN INSTITUTE OF MEDICAL RESEARCH [NZ/NZ]; a New Zealand non-profit organisation of Mein Street, Newtown, Wellington (NZ). **UNIVERSITY OF OTAGO** [NZ/NZ]; a body corporate established under the University of Otago ordinance 1869, Leith Street, Dunedin (NZ). **AGRESEARCH LIMITED** [NZ/NZ]; a New Zealand company and Crown Research Institute under the Crown Research Institutes Act 1992, Tower Block - 5th Floor, Ruakura Research Centre, East Street - Hamilton (NZ).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **SINGH-GILL, Gurmit** [IN/NZ]; c/o Chemistry Department, University of Otago, Leith Street, Dunedin (NZ). **LARSEN, David Samuel** [NZ/NZ]; c/o Chemistry Department, University of Otago, Leith Street, Dunedin (NZ). **JONES, Jeremy**

David [NZ/NZ]; c/o Chemistry Department, University of Otago, Leith Street, Dunedin (NZ). **SEVERN, Wayne Bruce** [NZ/NZ]; 1 Seddon Street, Upper Hutt (NZ). **HARPER, Jacquie Lucille** [NZ/NZ]; 35 Maungaraki Road, Korokoro, Lower Hutt (NZ).

(74) Agents: **CALHOUN, Douglas, C et al.**; A J Park, 6th Floor Huddart Parker Building, Post Office Square, P O Box 949, Wellington, 6015 (NZ).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SYNTHETIC MOLECULES HAVING IMMUNE ACTIVITY

(57) Abstract: The present invention is directed to synthetic molecules having biological activity similar to PIM (acyl glycerol phosphatidylinositol manno-oligosaccharide) activity, for use in the treatment and prevention of inflammatory or immune cell mediated diseases or disorders.

WO 2005/049631 A1